Article 19 Amendments

REVISED CLAIMS

[Received by the International Office on November 28, 2000 (11/28/00);
original Claims 1-15 replaced by new Claims 1-15 (3 pages)]

1. A compressed air nozzle having a system carrier with a hose connection for supplying a pressurized medium and an outlet valve with at least one outlet nozzle, characterized in that the system carrier (1) is designed to accommodate an integrated adjustable air reducing valve, and the throughput of the air reducing valve is adjustable by rotating or shifting the regulating sleeve (30) in or on the system sleeve (1), characterized in that a valve disk (152) of a tilt valve (150) forms a pressure reducing area (153) which, together with a pressure reducing area (121) of a regulating piece (120), forms the air reducing valve.

2. The compressed air nozzle according to Claim 1, characterized in that an insert (10) with a sealing element (12) is inserted into the system sleeve (1) and together with a regulating piece (20) and a regulating sleeve (30), forms the air-reducing valve.

3. The compressed air nozzle according to Claim 1 or 2, characterized in that the regulating piece (20) and the regulating sleeve (30) are arranged so that they are displaceable and/or rotatable with respect to the sealing element (12).

4. The compressed air nozzle according to one of Claims 1 through 3, characterized in that the regulating piece (20) and the regulating sleeve (30) are designed for connection and for support of the compressed air hose (9) for the supply of pressure medium.

5. The compressed air nozzle according to one of Claims 1 through 4, characterized in that the hose connection (20, 30; 120, 130) is designed to function as an air-reducing valve at the same time.

6. The compressed air nozzle according to one of Claims 1 through 5, characterized in that the compressed air hose (9) is inserted between the regulating piece (20) and the regulating sleeve (30), and the regulating piece (20) is inserted with a seal into the system sleeve (1) where it is locked in position by a connecting sleeve (90) which is screwed into the system sleeve (1).

7. The compressed air nozzle according to one of Claims 1 through 6, characterized in that a connecting sleeve (90) can be inserted into the system sleeve (1) and together with a clamping piece (100) it is designed for connection and support of a compressed air hose (9) for the supply

of the pressurized medium.

8. The compressed air nozzle according to one of Claims 1 through 7, characterized in that the compressed air nozzle has a permanently connected hose socket (70), where a compressed air shield is integrated into the hose socket (70).

9. The compressed air nozzle according to one of Claims 1 through 8, characterized in that a connection for an automotive air pressure gauge is integrated into the hose socket (70).

10. The compressed air nozzle according to one of Claims 1 through 9, characterized in that a protection against accidental contact is integrated into the hose socket (70).

11. The compressed air nozzle according to one of Claims 1 through 10, characterized in that the system sleeve (1) is surrounded by an outer sleeve (60) and both sleeves (1, 60) accommodate the lower section (71) of the hose socket (70) between them.

12. The compressed air nozzle according to one of Claims 1 through 11, characterized in that the hose socket (70) has a lower section (71) for attaching to the system sleeve, a middle section with a finger rest (73) and/or a finger guard for operation of the outlet valve and an upper section with a tip (74) which has a central outlet nozzle (75) for the pressurized medium.

13. The compressed air nozzle according to one of Claims 1 through 12, characterized in that the finger rest (73) has an integrally molded ring flange (73a).

14. The compressed air nozzle according to one of Claims 1 through 13, characterized in that a ring nozzle (76), which is used to produce an air shield, is provided around the central outlet nozzle (75).

15. The compressed air nozzle according to one of Claims 1 through 14, characterized in that a ring projection (77) which projects beyond the tip (74) and serves to provide protection against accidental contact is arranged between the central outlet nozzle (75) and the ring nozzle (76), and this ring projection is designed to accommodate the connection of a conventional automotive tire air pressure gauge.

16. The compressed air nozzle according to one of Claims 1 through 15, characterized in that a removable extension tube (80) is integrated with the pneumatic safety shield.

17. The compressed air nozzle according to one of Claims 1 through 16, characterized in that the extension tube (80) is provided with a collar on the compressed air end which prevents

unintentional loosening of the extension tube after being inserted into the hose socket (70) but on the other hand allows it to be loosened from the hose socket when a greater force is applied.

Article 34 Amendments

Compressed Air Nozzles

This invention relates to a compressed air nozzle according to the features of the definition of the species of Patent Claim 1.

Compressed air nozzles are sufficiently well known from the related art, in particular for their use as blow-out guns. The blow-out guns used in the past have consisted of a system carrier, for example, which may be connected to a high-pressure hose by means of a hose connection for supplying a pressurized medium. Furthermore, a manually or automatically operated outlet valve is also provided, whereby when this valve is operated, the pressurized medium flows out through an outlet nozzle or into a working machine to be activated to work. However, the systems available so far on the market, especially the blow-out guns, entail safety risks when used improperly. When blowing out a work piece without using safety goggles, eye injuries may occur due to blowback of chips and particles of dirt. Furthermore, it occurs every so often that such blowout guns are used against people either as a joke or to clean their work clothes, which thus results in painful wounds on the skin or intestinal rupture of the abdomen. To minimize such known accident risks, there are known air reducing valves which reduce the normal operating pressure of the compressed air supply from 6 to 10 bar down to approximately 0.5 to 1 bar, especially for hazardous areas of use, in particular for cleaning and blow-out jobs; this pressure level is usually sufficient for blowing out work pieces and is also stipulated by law in several countries. Such pressure reducing valves are connected between the blow-out gun and the high-pressure hose so that the entire device becomes rather heavy and difficult to handle. Since it is complicated and expensive to perform the pressure measurement at the point of use and therefore it is rarely done, a possibility of performing such a measurement is provided according to this invention.

The object of this invention is to improve upon a compressed air nozzle of the type defined above so that it meets the required or recommended safety standards and occupational safety regulations and guarantees easier handling at a much lower production cost.

Patent Claims

1. A compressed air nozzle having a system carrier with a hose connection for supplying a pressurized medium and an outlet valve with at least one outlet nozzle, wherein the system carrier (1) is designed to accommodate an integrated, adjustable air reducing valve, and the throughput of the air reducing valve is adjustable by rotating or shifting the regulating sleeve (30) in or on the system sleeve (1), characterized in that a valve disk (152) of a tilt valve (150) forms a pressure reducing area (153) which, together with a pressure reducing area (121) of a regulating piece (120), forms the air reducing valve.

2. The compressed air nozzle according to Claim 1, characterized in that an insert (10) with a sealing element (12) is inserted into the system sleeve (1) and together with a regulating piece (20) and a regulating sleeve (30) it forms the air-reducing valve.

3. The compressed air nozzle according to Claim 1 or 2, characterized in that the regulating piece (20) and the regulating sleeve (30) are arranged so that they are displaceable and/or rotatable with respect to the sealing element (12).

4. The compressed air nozzle according to one of Claims 1 through 3, characterized in that the regulating piece (20) and the regulating sleeve (30) are designed for connection and for support of the compressed air hose (9) for the supply of pressure medium.

5. The compressed air nozzle according to one of Claims 1 through 4, characterized in that the hose connection (20, 30; 120, 130) is designed to function as an air-reducing valve at the same time.

6. The compressed air nozzle according to one of Claims 1 through 5, characterized in that the compressed air hose (9) is inserted between the regulating piece (20) and the regulating sleeve (30), and the regulating piece (20) is ... with a seal into the ...